Amendments to the Specification:

On page 1, prior to the first paragraph which begins on line 3, please insert the following:

FIELD OF THE INVENTION

On page 1, prior to the second paragraph which begins on line 6, please insert the following:

BACKGROUND OF THE INVENTION

Please replace the paragraph which begins on page 1, line 6 and ends on line 23, with the following rewritten paragraph:

In ATR (attenuated total reflectance)-spectroscopy, the effect ~~is made use of, that~~ whereby a light beam at the interface between an optically more-dense medium of index of refraction n_1 and an optically less-dense medium of index of refraction n_2 [[-]] is made use of. Thus ~~thus~~, when ~~the following is true~~: $n_1 > n_2$ [[-]] ~~is totally reflected~~, and when the angle of incidence of the light beam exceeds the critical angle for total reflection, total reflection occurs. The sine of this critical angle corresponds to the quotient n_2/n_1. In the case of total reflection, the phenomenon occurs, in which the light beam exits at ~~the~~ a contact point A into the less-dense medium, then moves as a surface wave past the more-dense medium as far as a point B, and finally turns back into the optically more-dense medium. If there is no absorption in the optically less-dense medium, then the light beam is totally reflected without any weakening. However, if the optically less-dense medium does absorb the penetrating radiation, then a weakening of the totally reflected light beam occurs. This weakening depends on the wavelength and can be used for so-called internal reflection spectroscopy[[:]]. If one determines the transmission[[-]], or absorption[[-]], spectrum of the totally reflected radiation, then one obtains information concerning the composition of the optically less-dense medium. The optically less-dense medium can be, for example, an

IR-absorbing, powdered substance, or a fluid medium, which the ATR-probe is directly contacting.

Please replace the paragraph which begins on page 2, line 1 and ends on line 12, with the following rewritten paragraph:

US Patent No. 5,459,316 describes an ATR-probe for the IR-region that can be used in powdered or fluid media. Light is guided by way of a measuring tube to, respectively from, the ATR-crystal[[.]], with the ~~The~~ lateral surface of the ATR-crystal facing the medium[[.]] , and that facing away, are both wedge-shaped, as seen in cross section. Preferably, the embodiments of the ATR-crystal disclosed in this patent are rotationally symmetric about their longitudinal axis. The double-conical form of such an ATR-crystal, or of such an ATR reflection element, for the prevention of disturbing interferences in the Fourier transform (FT-IR) spectrometer is complicated and can be avoided by the use of the spectrometer proposed in this patent. Moreover, the reflection element proposed in US Patent No. 5,459,316 is too large in combination with an FT-IR spectrometer to be able to be produced cost-favorably from the ideal material diamond.

On page 3, prior to the paragraph which begins on line 7, please insert the following:

SUMMARY OF THE INVENTION

On page 8, prior to the paragraph which begins on line 7, please insert the following:

BRIEF DESCRIPTION OF THE DRAWINGS

Please replace the paragraph which begins on page 8, line 7 and ends on page 9, line 19, with the following rewritten paragraph:

Fig. 1 is a schematic presentation of a first embodiment of the device of the invention;

Fig. 2a is a schematic presentation of a cross-section converter with optical fiber duplexer;

Fig. 2b is a front view of the input and output sections of the cross-section converter of Fig. 2a;

Fig. 3a is a front view of a first form of embodiment of the ATR reflection element of the invention;

Fig. 3b is a cross section of the form of embodiment shown in Fig. 3a taken on the cutting plane A-A of Fig. 3a;

Fig. 3c is a perspective view of the form of embodiment shown in Fig. 3a;

Fig. 3d is a schematic representation of a form of embodiment of the process seal of the ATR reflection element of the invention;

Fig. 4a is a front view of a second form of embodiment of the ATR reflection element of the invention;

Fig. 4b is a side view of the form of embodiment shown in Fig. 4a, taken according to the reference A-A of Fig. 4a;

Fig. 4c is a cross section taken on the cutting plane A-A of Fig. 4b;

Fig. 4d is a perspective views of the form of embodiment shown in Fig. 4a;

Fig. 5a is a front view of a third form of embodiment of the ATR reflection element of the invention;

Fig. 5b is a side view of the form of embodiment shown in Fig. 5a, according to the reference A-A of Fig. 5a;

Fig. 5c is a cross section taken according to the cutting plane A-A of Fig. 5b;

Fig. 5d is a perspective view of the form of embodiment shown in Fig. 5a;

Fig. 6 is a schematic representation of a second embodiment of the device of the invention;

Fig. 7 is a schematic representation of a third embodiment of the device of the invention;

Fig. 8 is a schematic representation of a cross-section converter, which is preferably used with the embodiments of Figs. 6 and 7;

Fig. 9 is a schematic representation of a plug connecter for mounting the optical waveguide to the LVF-spectrometer; and

Fig. 10 is a schematic representation of the measuring tip of an ATR-probe having a microprism.

On page 9, prior to the paragraph which begins on line 20 , please insert the following:

DESCRIPTION OF THE PREFERRED EMBODIMENTS